

Coupler connector - PRC 5-FC-FS6 8-21 - 1410656

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Circular connectors (cable-side), Range of articles: PRC, Coupler connector, type: Can only be released with a tool, housing material: PPE, color: black, number of positions: 5, min. conductor cross section: 1.5 mm², max. conductor cross section: 6 mm², nom. voltage: 690 V AC, rated current: 35 A, Connection method: Screw connection, Type of contact: Socket, min. cable diameter: 8 mm, max. cable diameter: 21 mm. Variant for release with a tool

Your advantages

- ✓ Up to 75% smaller in size than industrial connectors with the same rating
- ✓ Locking mechanism can be unlocked manually or using a tool
- ✓ Suitable for applications in atmospheres containing salt and in direct sunlight
- ✓ Ideal for indoor and outdoor use due to weatherproof materials



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 904247 |
| GTIN | 4046356904247 |
| Weight per Piece (excluding packing) | 100.000 g |
| Custom tariff number | 85366990 |
| Country of origin | Poland |

Technical data

General data

| | |
|-----------------------------|-----------------|
| Number of positions | 5 |
| Protection class | II |
| Color | black |
| Locking type | Snap-in locking |
| Insertion/withdrawal cycles | 100 |
| Pull-out-force | 175 N ± 50 N |

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Technical data

General data

| | |
|--|--------------------------------|
| Insertion force | 40 N ±10 N |
| Degree of protection (when plugged in) | IP66 / IP68 (2m / 24h) / IP69K |
| Width | 37.6 mm |
| Height | 37.6 mm |
| Length | 107.5 mm |

Connection data

| | |
|--|---|
| Rated current | 35 A (With 6 mm ² conductor cross section in accordance with IEC 61984) |
| | 32 A (With 6 mm ² conductor cross section in accordance with IEC 61535) |
| | 21.4 A (With 6 mm ² conductor cross section and 85 °C in accordance with 2 PFG 1915) |
| | 30 A (With 6 mm ² /AWG 10, in accordance with UL 2238) |
| Nominal voltage ATD | 690 V AC (in accordance with IEC 61984) |
| | 500 V AC (in accordance with IEC 61535/2 PFG 1915) |
| | 600 V AC (In accordance with UL 2238) |
| Rated voltage (III/2) | 690 V |
| Stripping length | 12 mm |
| Torque | max. 1 Nm (Contact screw) |
| Type of contact | Socket |
| Stripping length of the sheath | 50 mm |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 1.5 mm ² |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 6 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve min. | 1.5 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve max. | 6 mm ² |
| Conductor cross section solid min. | 1.5 mm ² |
| Conductor cross section solid max. | 6 mm ² |
| Conductor cross section flexible min. | 4 mm ² |
| Conductor cross section flexible max. | 6 mm ² |
| Type | Can only be released with a tool |
| Connection method | Screw connection |
| Degree of protection | IP66 / IP68 (2m / 24h) / IP69K |
| Insertion force | 40 N ±10 N |
| Stripping length of the individual wire | 12 mm (Lay PE conductor 8 mm leading) |
| Overvoltage category | III |
| Insulating material group | I / CTI 600 |
| Pull-out-force | 175 N ± 50 N |
| Cable diameter ¹ | 8 mm ... 21 mm |

Material data

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Material data

| | |
|---------------------------|---------------|
| Contact material | Cu alloy |
| Contact surface material | silver-plated |
| Contact carrier material | PPE |
| Housing material | PPE |
| Seal material | EPDM |
| O-ring material | EPDM |
| Cable seal material | EPDM |
| Cable gland material | PPE |
| Color of the housing part | black |
| Knurl material | PPE |

Standards and Regulations

| | |
|--|---|
| Halogen-free | yes |
| Flammability rating according to UL 94 | V0 |
| Safety note | <ul style="list-style-type: none"> • WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible. |
| | <ul style="list-style-type: none"> • WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product. |
| | <p>WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p> |
| | <ul style="list-style-type: none"> • Assembled products may not be manipulated or improperly opened. |
| | <ul style="list-style-type: none"> • Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products). |
| | <ul style="list-style-type: none"> • When using the product in direct connection with third-party manufacturers, the user is responsible. |
| | <ul style="list-style-type: none"> • For operating voltages > 50 V AC, conductive connector housings must be grounded |
| | <ul style="list-style-type: none"> • Ensure that the protective or functional ground has been properly connected. |
| | <ul style="list-style-type: none"> • VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector |
| | <ul style="list-style-type: none"> • Observe the corresponding technical data. You will find information: <ul style="list-style-type: none"> o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product |
| | <ul style="list-style-type: none"> • Only use tools recommended by Phoenix Contact |

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Technical data

Standards and Regulations

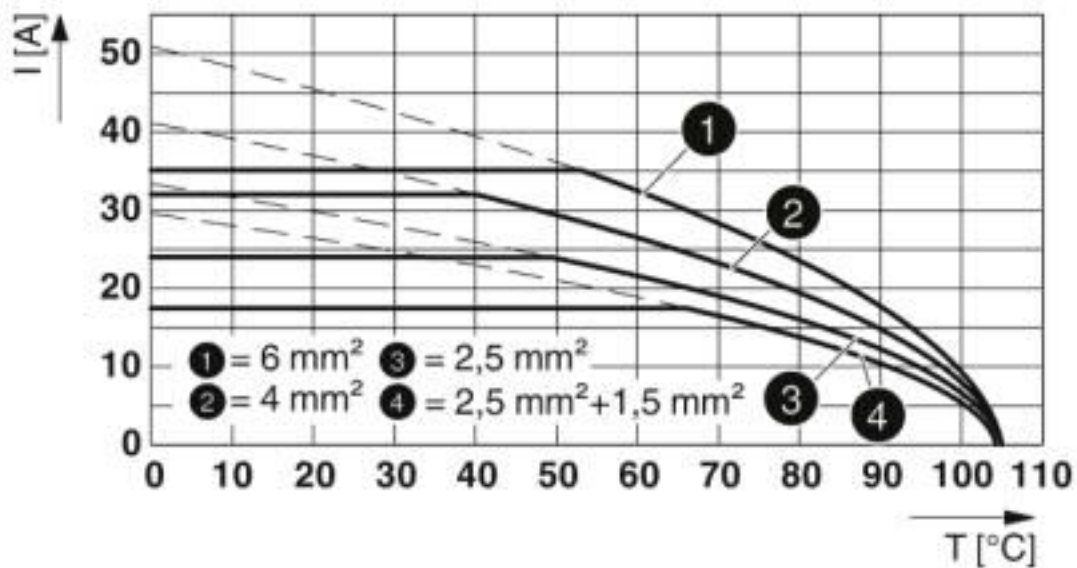
| | |
|--|--|
| | <ul style="list-style-type: none"> The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product. |
| | <ul style="list-style-type: none"> Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products |
| | <ul style="list-style-type: none"> Operate the connector only when it is fully plugged in. |
| | <ul style="list-style-type: none"> Operate the connector only when it is fully plugged in and interlocked. |
| | <ul style="list-style-type: none"> Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards. |
| | <ul style="list-style-type: none"> Observe the minimum bending radius of the cable. Lay the cable without twisting it. |
| | <ul style="list-style-type: none"> The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12). |

Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

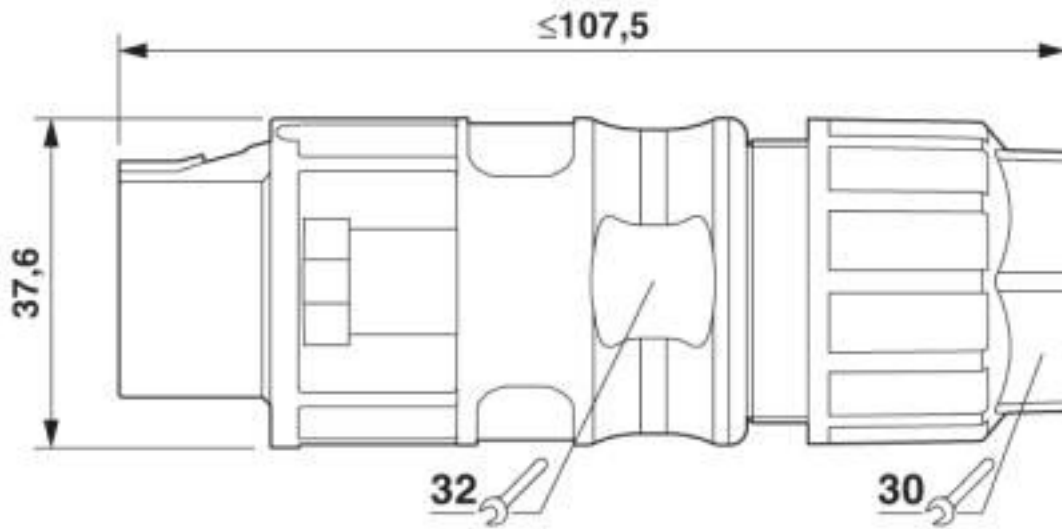
Drawings

Diagram

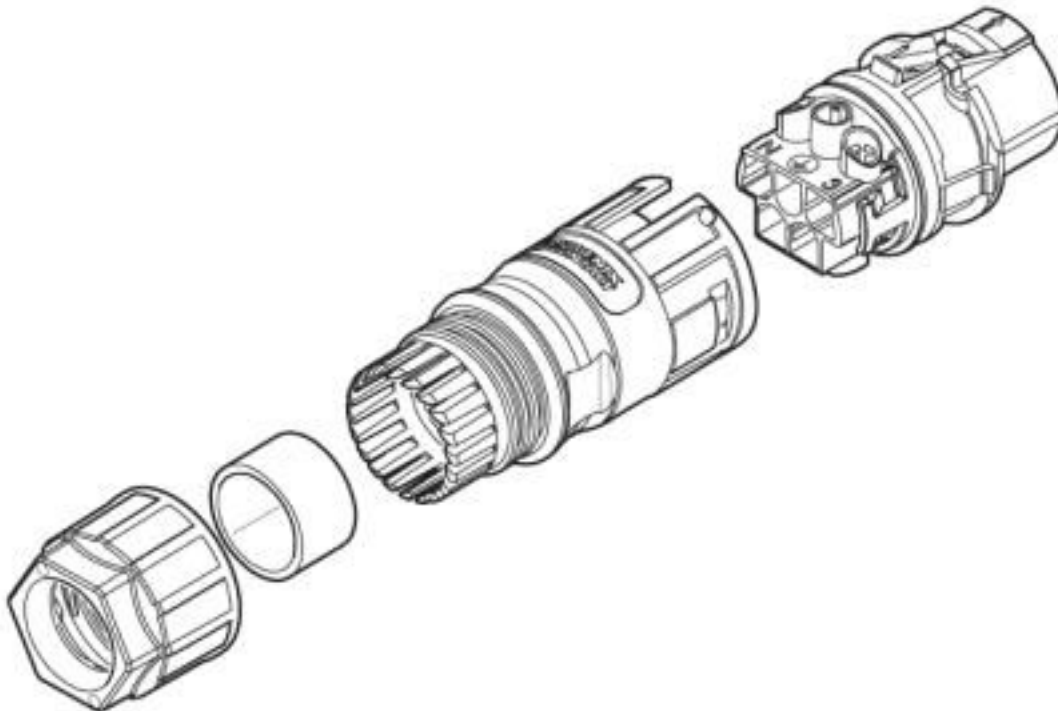


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Dimensional drawing



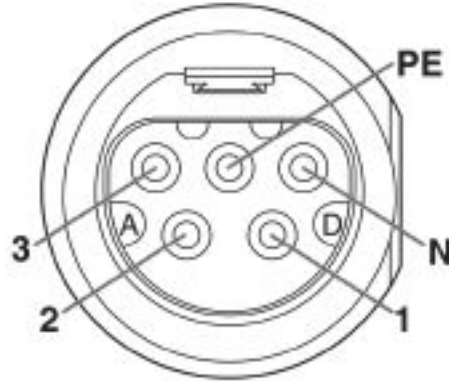
Schematic diagram



Schematic design

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Schematic diagram



Connector pin assignment

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440102 |
| eCl@ss 4.0 | 27260700 |
| eCl@ss 4.1 | 27260700 |
| eCl@ss 5.0 | 27260700 |
| eCl@ss 5.1 | 27260700 |
| eCl@ss 6.0 | 27260700 |
| eCl@ss 7.0 | 27440102 |
| eCl@ss 8.0 | 27440102 |
| eCl@ss 9.0 | 27440102 |

ETIM

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|----------|----------|
| ETIM 4.0 | EC002641 |
| ETIM 5.0 | EC002061 |
| ETIM 6.0 | EC002061 |

UNSPSC

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|-------------|----------|
| UNSPSC 13.2 | 39121413 |
| UNSPSC 18.0 | 39121413 |
| UNSPSC 19.0 | 39121413 |
| UNSPSC 20.0 | 39121413 |
| UNSPSC 21.0 | 39121413 |

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Approvals


Approvals

Approvals

EAC / DNV GL / UL Listed / cUL Listed / TÜV Rheinland / TÜV Rheinland / TÜV Rheinland / cULus Listed

Ex Approvals


Approval details

| | | | |
|-----|---|--|---------|
| EAC |  | | B.01687 |
|-----|---|--|---------|


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|--------|--|---|------------|
| DNV GL |  | https://approvalfinder.dnvgl.com/ | TAE00002KM |
|--------|--|---|------------|

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|-----------|---|---|------------------|
| UL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E221474-20150513 |
|-----------|---|---|------------------|

| | |
|----------------------------|-------|
| Nominal voltage UN | 600 V |
| Nominal current IN | 30 A |
| mm ² /AWG/kcmil | 14-10 |

| | | | |
|------------|---|---|------------------|
| cUL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E221474-20150513 |
|------------|---|---|------------------|

| | |
|----------------------------|-------|
| Nominal voltage UN | 600 V |
| Nominal current IN | 30 A |
| mm ² /AWG/kcmil | 14-10 |

| | | | |
|---------------|---|---|------------|
| TÜV Rheinland |  | http://www.certipedia.com | R 60117908 |
|---------------|---|---|------------|

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Approvals

| | | | |
|----------------------------|--|---|-----------------|
| TÜV Rheinland | | http://www.certipedia.com | R 60117904-0002 |
| Nominal voltage UN | | 690 V | |
| Nominal current IN | | 35 A | |
| mm ² /AWG/kcmil | | 6 | |

| | | | |
|---------------|--|---|-----------------|
| TÜV Rheinland | | http://www.certipedia.com | R 60117904-0001 |
|---------------|--|---|-----------------|

| | |
|--------------|--|
| cULus Listed | |
|--------------|--|

Accessories

Accessories

Protective cover

Protective cap - PRC COVER F - 1409236



Protective cover, Range of articles: PRC, Protective cap, housing material: PPE, color: black. Suitable for couplings (FS)

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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Accessories

Screwdriver - SZF 0-0,4X2,5 - 1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

Philips screwdriver - SF-PH 1-80 S-VDE - 1212693



Screwdriver, crosshead PH (lasered), insulated, size: PH 1 x 80, 2-component handle, with non-slip grip

Universal tools

Tool - UNIFOX-WRENCH - 1212835



Screw pliers, with fast adjustment, for wrench size 10 mm ... 36 mm, size: 260 mm